

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10.

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

> OFFICE OF AIR, WASTE AND TOXICS

April 20, 2011

Jeff Johnston
Air Quality Program
Washington State Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Draft PSD Permit to increase NOx emission from Boiler #7 at Simpson Tacoma Kraft

Dear Mr. Johnston:

This letter follows up on discussions and e-mails between your staff at the Washington Department of Ecology (Ecology) and my staff at Region 10 regarding the draft permit to increase nitrogen oxide (NOx) emissions from Boiler #7 at the Simpson Tacoma Kraft (STK) facility, in Tacoma Washington.

Region 10 staff have reviewed the STK draft permit and technical support document (TSD), dated March 11, 2011. As a result of these reviews, we have a number of initial concerns regarding this draft permit and TSD.

- STK is seeking to significantly increase its NOx emission limits on Boiler #7
   established under Ecology's PSD permit 06-02. Under the PSD program, a relaxation
   of emission limits is considered a change in method of operation. Accordingly, all
   regulated NSR pollutams must be evaluated to determine whether there is a
   significant emission increase of those pollutants. In addition to NOx, these pollutants
   include PM2.5, Municipal Waste Combustor (MWC) organics, metals, and acid
   gases, and Greenhouse Gases as provided for under 40 CFR 52.21.
- For any significant net emission increases of PM2.5, SO2, and/or NOx, Ecology
  would need to apply nonattainment New Source Review (NSR) to these pollutants as
  the STK facility is located in a PM2.5 nonattainment area.
- 3. STK needs to provide an inventory of all the materials and fuels, regardless of quantity, burned in Boiler #7 prior to and after the various boiler changes including the time periods during calendar years 2004 and 2005, and July 2009 to the present. This information needs to include the composition, quantities, and combinations, in which the different materials and fuels are burned and how these fuels and materials are processed into the boiler (e.g., how the different gas, liquid, and solid materials and fuels are combined and fed into the boiler). This information is necessary to

determine the applicable NSPS and NESHAP standards in order to properly determine the applicable regulated pollutants, best available control technology (BACT), and maximum degree of pollutant reduction associated with BACT. STK also needs to provide the names of the suppliers of all materials and fuels used and the necessary information to contact and verify with them the sourcing of their feedstock used in the materials and fuels generated. STK has indicated that the materials and fuels burned include but are not limited to: natural gas, used oil, painted wood, urban wood, construction and demolition (C&D) wood, creosote-treated wood (e.g., old railroad ties and utility poles), fuel derived from STK's waste paper and cardboard recycling operation, old corrugated cardboard rejects, sludge generated from wood chips, sludge generated from recycled cardboard and paper, wood waste buried in old lumber mill sites, and wood from logs transported and stored in salt water.

- 4. STK needs to provide the names of the suppliers and the specific sources of their salt-laden hog fuel so that the chlorine content of the fuel currently used can be verified. To the extent the information is considered confidential, STK can make a claim of business confidentiality along with their submittal of the information, but a claim of confidentiality cannot be used to avoid submitting information. STK should consult with EPA and Ecology staff for specific guidance on establishing claims of confidentiality.
- 5. STK needs to provide contact information regarding the water utility so that the limitations of its use and cost can be verified. Results from salinity testing of the non-municipal water currently being used in the sludge process, the location of the water in-take, and the quantities in which this water supply is being used are needed to determine the current chloride content of the sludge being generated and incinerated in Boiler #7. All direct testing of the chloride content of this sludge since July 2009 should also be provided.
- 6. Detailed cost information with respect to the evaluation of all BACT controls must be provided. The source of that cost information must also to be provided to facilitate the verification of the information. References for the many technical details included in the TSD discussing the various BACT options need to be provided to allow for their verification.
- 7. STK has evaluated some acid-gas controls to control hydrogen chloride emissions associated with the salt-laden wood and sludge in Boiler #7. In their analysis STK needs to include all applicable acid-gas controls provided for under EPA's top-down analysis. These controls include but are not limited to dry scrubbing such as sorbent injection and spray drying.

This letter identifies a number of concerns with the implementation of the PSD program at this facility. STK's responses may prompt the need for more information. Region 10 is interested in ensuring that the PSD requirements at the STK facility are implemented in a manner consistent with the federal PSD program as it is implemented nationally by EPA. We would like to discuss

all of these issues more fully in a meeting or telephone call and look forward to the opportunity to work with Ecology as you continue to implement this important program.

Please contact me at 206-553-6908 or <a href="helm.nancy@epa.gov">helm.nancy@epa.gov</a> to arrange for further discussion of these issues.

Sincerely,

Nancy Helm, Manager

Federal and Delegated Air Programs Unit

cc: David Ogulei,

Washington Department of Ecology